

well about the fort, as on the declivities of the mountain, alarmed by this appearance, betook themselves to flight; but before they could all save themselves, the mountain began to give way, and the greatest part of it actually *fell in*, and disappeared in the earth. At the same time a tremendous noise was heard, resembling the discharge of the heaviest cannon. Immense quantities of volcanic substances, which were thrown out at the same time, and spread in every direction, propagated the effects of the explosion, through the space of many miles."

"It is estimated that an extent of ground of the mountain itself, and its immediate environs, fifteen miles long, and full six broad, was by this commotion swallowed up in the bowels of the earth. Several persons sent to examine the condition of the neighbourhood, made report that they found it impossible to approach the place where the mountain stood, on account of the heat of the substances which covered its circumference, and which were piled on each other; although this was the 24th of September, and thus full six weeks after the catastrophe. It is also mentioned, that forty villages, partly swallowed up by the ground, and partly covered by the substances thrown out, were destroyed on this occasion, and that two thousand nine hundred and fifty-seven of the inhabitants perished. A proportionate number of cattle was also destroyed, and most of the plantations of cotton, indigo, and coffee, in the adjacent districts, were buried under the volcanic matter. The effects of this explosion are still very apparent in the remains of this volcano."

It has been already stated, that the volcanoes in the Andes more frequently throw out water and mud than lava. The damage which these aqueous and muddy eruptions occasion, is often prodigiously great. Sometimes, the deluge of water attending a volcanic explosion does not come from the interior of the earth, but from the snow which covers the mountain being rapidly dissolved; but, in other instances, it proceeds from the crater.* Interior cavities, of vast extent and depth, containing water, are opened during an eruption, and the water coming into contact with ignited lava, is forcibly driven out, and, according to Humboldt, carries along with it a great quantity of small fishes, which he has denominated *Pimelodes Cyclopus*. These fishes are about four inches in length, and are of the same species that inhabit the neighbouring brooks and lakes: the number thrown out is sometimes so great, that their putrefaction contaminates the air, and occasions serious maladies among the inhabitants of the adjacent country.

Though the water ejected from volcanoes may, in many instances, be regarded as of accidental occurrence, I conceive it to be different

* It ought to be stated, that the existence of internal cavities filled with water supplied from the melted snow, is an inference from volcanic phenomena, which, however reasonable it may appear, it is impossible to prove.